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Combined Toothbrush and Toothpaste Storage Device

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Amendment by substitute specification. Replace specification with following substitute specification.

BACKGROUND OF THE INVENTION

This version of the invention is concerned with the field of toothbrush and toothpaste storage devices. More specifically, this version of the invention is concerned with toothbrush and toothpaste storage devices that are comprised of a main container or receptacle having a plurality of individual receptacles and compartments for hygienic storage of toothbrushes and toothpaste and attachment means to affix said storage container or receptacle to the wall of a bathroom at a convenient location therein.

PRIOR ART

Proper dental hygiene requires the regular use of a toothbrush and toothpaste to remove food particles and plaque from the exterior of teeth and to clean and massage the gums. In a dwelling, toothbrushes and toothpaste are typically stored in a bathroom or other room or space designated for personal hygiene. In most dwellings, especially those with families, the toothbrushes and toothpaste, contained in a tube, are stored in a variety of ways. A common means of toothbrush storage usually consists of a toothbrush rack or holder, which is comprised of a support member configured with several apertures into which toothbrushes are inserted and maintained thereon by the bristles thereof resting upon adjacent surfaces of the support bar. An attachment panel or means to affix the support member to a bathroom wall is located on a rear side of the

support member in order to affix the toothbrush rack or holder to a wall surface at a convenient location thereon, typically over a sink or vanity where most tooth brushing occurs. Some toothbrush racks or holders are fabricated with means to store toothpaste, such as an aperture or depression for placement of a tube of toothpaste. Other means of storing toothbrushes may consist of unused drinking receptacles whereby one end of the toothbrush is placed into the interior of the cup and a second end is exposed above the cup edge or simply placing a toothbrush on the surface of a sink, vanity, or nearby shelf.

The means of storing toothbrushes described above are unsatisfactory in providing a sanitary and hygienic location to house toothbrushes during non-use. For instance, a toothbrush stored within a rack, holder, or cup whereby the bristles are exposed to the ambient environment may serve as a host for the accumulation of certain airborne organisms within the bristles thereof. The cup over time may accumulate dirt, dust, and other agents within the interior thereof, which may be transferred to the handle of a toothbrush and ultimately to the hands of the user and the bristles of the brush. Additionally, toothbrush positioned upon the surface of a sink or vanity may allow the bristles to collect dirt and or otherwise become soiled. Toothpaste that is not stored properly will soil adjacent areas as toothpaste will drop onto the surface of a sink or vanity or onto nearby toothbrushes.

What is needed then to overcome the aforementioned disadvantages of conventional methods and means of storing toothbrushes and toothpaste within a bathroom or other room or space wherein personal hygiene is performed is the provision of a toothbrush and toothpaste storage device that is comprised of a container or receptacle having a plurality of individual receptacles and compartments for hygienic storage of toothbrushes and toothpaste and attachment means to affix said storage container or receptacle to the wall of a bathroom at a convenient location therein. Such a storage device would allow storage of toothbrushes and toothpaste in various quantities therein and to permit attachment to the surfaces of walls.

DISCUSSION OF THE PRIOR ART

Numerous designs for toothbrush and toothpaste storage devices and apparatuses have been provided in the prior art. Even though these designs may be suitable for the specific individual purposes to which they address, they would not be suitable for the purposes of the present version of the invention as such storage devices and apparatuses are generally limited in their storage capacity and adaptability for attachment to various wall surfaces. For instance, U.S. Patent No. 4,995,511, Toothbrush and Toothpaste Holder, issued to Evans on 26 February 1991 discloses a toothbrush and toothpaste holder, a free standing container for storing toothbrushes and a quantity of toothpaste.

As such, it may be appreciated that there is a continuing need for a new and improved toothbrush and toothpaste storage device that is comprised of a container or housing into which a plurality of individual toothbrush receptacles are inserted and of a separate receptacle for storage of a tube of toothpaste. In a preferred embodiment of the invention, the storage device houses a toothbrush carrying case that can be removed from the storage device for transporting a plurality of toothbrushes in a hygienic environment. The toothbrush and toothpaste storage device can be affixed to wall surfaces proximate to a location at which tooth brushing occurs, such as that over a sink or vanity. In these respects, the present version of the invention substantially departs from the conventional concepts and designs of the prior art, and in so doing provides an apparatus that substantially fulfills this need. Additionally, the prior patents and commercial techniques do not suggest the present inventive combination of component elements arranged and configured as disclosed herein.

The present invention achieves its intended purposes, objects, and advantages through a new, useful and unobvious combination of method steps and component elements, with the use of a minimum number of functioning parts, at a reasonable cost to manufacture, and by employing only readily available materials.

SUMMARY OF THE INVENTION

The present version of the invention, which will be described in greater detail hereinafter, relates to the field of toothbrush and toothpaste storage devices. More specifically, this version of the invention is concerned with toothbrush and toothpaste storage devices that are comprised of a main container or receptacle having a plurality of individual receptacles and compartments for hygienic storage of toothbrushes and toothpaste and attachment means to affix said storage container or receptacle to the wall of a bathroom at a convenient location therein. My version of the invention overcomes all of the shortcomings listed previously, in addition to novel aspects that will be described in detail hereinafter.

Described briefly, according to a typical embodiment, the invention presents a toothbrush and toothpaste storage device that is comprised of a rectangular housing defined by a toothbrush container and a toothpaste tube container. A series of rectangular cavities are located in a front sidewall of the toothbrush container, and rectangular toothbrush receptacles with a sliding top panel are situated in the cavities. The toothpaste tube container is located on the top side of the toothbrush container and encloses a rectangular interior space into which a tube of toothpaste is stored. A cover is slidingly engaged within opposing sidewalls of the toothpaste tube container and can be opened to permit access to the interior of the toothpaste tube container and closed for storage of a tube of toothpaste.

A rectangular toothbrush carrying case is disposed within the interior of the toothbrush container through an aperture located on a sidewall of the container. A sliding panel permits access to the toothbrush carrying case, which can be removed from and inserted into the toothbrush container through said aperture. The toothbrush carrying case is comprised of a rectangular container into which a divider and foam pad is located. A sliding cover is disposed on opposing edges thereof into grooves formed into opposing sidewalls of the carrying case. A series of toothbrushes can be stored within individual compartments formed by the divider, the foam pad and sidewalls of the carrying case.

A concavity is located in the rear sidewall of the toothbrush container, and a VELCRO® pad is attached to an interior sidewall within said concavity. The concavity receives partially a wall housing base, which is comprised of a middle rigid panel, an adhesive layer attached a first side of the rigid panel, and a VELCRO® pad attached to a second side of the rigid panel. The wall housing base is affixed to a wall surface by means of the adhesive layer, and the toothbrush and toothpaste storage device is releasably attached to the wall housing base by engaging the VELCRO® pads.

My invention, therefore, resides not in any one of these features per se, but rather in the particular combination of all of them herein disclosed. It is

distinguished from the prior art in this particular combination of all of its structures for the functions specified.

In order that the detailed description of the invention may be better understood and that the present contribution to the art can be more fully appreciated, additional features of the invention will be described hereinafter. It should be appreciated by those skilled in the art that the conception and the disclosed specific methods and structures may be readily utilized as a basis for modifying or designing other structures for carrying out the same purposes of the present invention. It should be realized by those skilled in the art that such equivalent methods and structures do not depart from the spirit and scope of the invention.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the

designing of other structures, methods and systems for carrying out the several purposes of the present invention.

Further, the purpose of the foregoing abstract is to enable the U.S. Patent and Trademark Office and the public generally, and especially the scientists, engineers and practitioners in the art who are not familiar with patent or legal terms or phraseology, to determine quickly from a cursory inspection the nature and essence of the technical disclosure of the application. The abstract is neither intended to define the invention of the application nor is it intended to be limiting as to the scope of the invention in any way.

OBJECTS OF THE INVENTION

Accordingly, it is an object of my version of the invention to provide a low-cost, easy-to-manufacture, and easy-to-market toothbrush and toothpaste storage device.

A further object of my version of the invention is to provide an easy-to-use and versatile toothbrush and toothpaste storage device.

A significant object of the invention is to provide a toothbrush and toothpaste storage device that is comprised of a rectangular housing having a toothbrush container, said container having a series of rectangular cavities located in a front sidewall thereof with rectangular toothbrush receptacles disposed in said cavities, an aperture located on a sidewall of said toothbrush container into which a toothbrush carrying case is housed, access to such permitted by a sliding panel door located over said aperture; a toothpaste tube container, said container located on the top side of the toothbrush container and enclosing a rectangular interior space into which a tube of toothpaste is stored, a cover located above said interior space and slidingly engaged within opposing sidewalls of the toothpaste tube container; and a wall housing base comprised of a middle rigid panel, adhesive layer attached to a first side of said panel, and a VELCRO® pad attached to a second side of said rigid panel, said VELCRO® pad releasably attached to a VELCRO® pad located within a concavity formed into a rear sidewall of said toothbrush and toothpaste storage device when said

device is mounted to a wall surface, said method of mounting consisting of attaching the adhesive layer of the wall housing base to a wall surface and engaging said VELCRO® pads.

A final but very significant object of the invention is to provide a toothbrush and toothpaste storage device that permits a tube of toothpaste and a plurality of toothbrushes to be stored in a hygienic and sanitary manner within a bathroom or other room or space in which personal hygiene is performed and affixed to a wall surface in said rooms or spaces so as to allow easy access to said tube of toothpaste and toothbrushes proximate to an area at which tooth brushing is performed, such as over a sink or vanity.

Other objects and advantages of the present invention will become apparent from the following description, taken in connection with the accompanying drawings.

For a better understanding of the invention, its operating advantages and the specific objects attained by its uses, reference should be made to the accompanying drawings and descriptive matter in which there is illustrated the preferred embodiment of the invention. The foregoing has outlined some of the more pertinent objects of the invention. These objects should be construed to be merely illustrative of some of the more prominent features and applications of the present invention. Many other beneficial results can be attained by applying the

disclosed invention in a different manner or by modifying the invention within the scope of the disclosure. Accordingly, other objects and a fuller understanding of the invention may be had by referring to the summary of the invention and the detailed description of the preferred embodiments in addition to the scope of the invention illustrated by the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing and other objects, features and advantages of the invention will become more fully understood from the following description of the preferred embodiments of the invention as illustrated in the accompanying drawings in which like reference characters refer to the same parts throughout different views. The drawings are not necessarily to scale, emphasis instead being placed upon illustrating the principles of the invention. The drawings constitute a part of this specification and include the exemplary embodiment to the invention, which may be embodied in various forms. It is to be understood that in some instances various aspects of the invention may be shown exaggerated or enlarged to facilitate an understanding of the invention.

FIG. 1 is a perspective view of a toothbrush and toothpaste storage device in accordance with the present version of the invention with a wall attachment panel aligned for releasable attachment at a first side thereof to the rear of the toothbrush and toothpaste storage device and for attachment at a second side thereof to a wall.

FIG. 2 is a side elevation view of a toothbrush and toothpaste storage device illustrating a rear cavity into which the wall attachment panel is inserted and attached to said device.

FIG. 3 is an exploded, perspective view of a toothbrush and toothpaste storage device in accordance with the present version of the invention illustrating the constituent components thereof.

FIG. 4 is a detailed perspective view of a sliding panel of a toothbrush and toothpaste storage device.

FIG. 5 is a detailed perspective view of a toothbrush carrying case illustrating the constituent components thereof.

FIG. 6 is a detailed perspective view of the divider of a toothbrush carrying case illustrating the construction thereof.

FIG. 7 is a detailed perspective view of a toothbrush receptacle illustrating the constituent components thereof.

DRAWING REFERENCE NUMERALS

10	Toothbrush and Toothpaste Storage Device
12	Toothbrush Container
14	Toothpaste Tube Container
16a	Sidewall
16b	Sidewall
18a	Sidewall
18b	Sidewall
20	Aperture
22	Toothbrush Receptacle
24	Receptacle Handle
26	Panel
28	Handle
30a, b	Sidewall
32a, b	Sidewall
34	Cover
36	Finger Pad
38	Wall Attachment Panel
40	Velcro Pad
42	Rigid Panel
44	Adhesive Layer
46	Cavity
48	Velcro Pad

50	Sidewall
52	Sidewall
54	Sidewall
56	Receptacle Cover
58	Cavity
60	Bottom Sidewall
62	Slot
64	Groove
66	Toothbrush Carrying Case
68	Container
70	Handle
72	Cover
74	Finger Pad
76	Knob
78a, b	Sidewall
80a, b	Sidewall
82	Slot
84	Groove
86	Foam Pad
88	Divider
90	Compartment
92	Toothbrush
94	Partition

- 96 Partition
- 98 Opening
- 100 Shank
- 102 Handle
- 104a, b Sidewall
- 106a, b Sidewall
- 108 Slot
- 110 Groove
- 112 Finger Pad
- 114 Finger Pad

Detailed Description of the Preferred Embodiment

A detailed description of the preferred embodiment is provided herein. It is to be understood, however, that the present invention may be embodied in various forms. Therefore, specific details disclosed herein are not to be interpreted as limiting, but rather as a basis for the claims and as a representative basis for teaching one skilled in the art to employ the present invention in virtually any appropriately detailed system, structure or manner.

Referring now to the drawings and, in particular, to FIG. 1 wherein there is illustrated the toothbrush and toothpaste storage device **10**. The present version of the invention **10** is comprised of a toothbrush container **12** and a toothpaste tube container **14**, said toothpaste tube container **14** located on the top side of the toothbrush container **12**. The toothbrush container **12** consists in part of opposed front **16a** and rear **16b** sidewalls (see FIG. 2 for rear sidewall **16b** in phantom line) and opposed first **18a** and second **18b** lateral sidewalls. A rectangular aperture **20** is located in the second lateral sidewall **18b**. A series of rectangular toothbrush receptacles **22** with handles **24** is disposed within cavities formed into the front sidewall **16a** of the toothbrush container **12**, and a rectangular panel **26** with handle **28** is disposed within a dedicated cavity located in said front sidewall **16a** of the toothbrush container **12**. The cavity receiving the panel **26** communicates with the aperture **20** at the second lateral sidewall **18b** so that the panel **26**, when inserted into said cavity, occupies the aperture **20**.

The toothpaste tube container **14**, located above the toothbrush container **12**, is comprised in part of opposed front **30a** and rear **30b** sidewalls and opposed first **32a** and second **32b** lateral sidewalls. A rectangular cover **34** with finger pad **36** is disposed within the tube container **14** at the top edges thereof. A wall attachment panel **38** is aligned for attachment to within the rear side of the toothbrush container **12** of the storage device **10**, said attachment panel **38** comprised of a rectangular pad **40** of hook and loop material, such as VELCRO®, rigid panel **42**, and adhesive layer **44**. As displayed in FIG. 2, a cavity **46** (shown in phantom line) is located within the rear side of the toothbrush container **12** of the storage device **10**. A rectangular pad **48** (shown in phantom line) of hook and loop material, such as VELCRO®, is affixed to the rear sidewall **16b** located adjacent to the cavity **46**. As such, the storage device **10** is thus attached to a wall surface, such as that of a bathroom wall over a sink or vanity, by affixing the wall attachment panel **38** by means of the adhesive layer **44** to said wall surface and then positioning the rear side of the toothbrush container **12** of the storage device **10** against the wall attachment panel **38** until the wall attachment panel **38** is received by the cavity **46**, and cooperating VELCRO® pads **40**, **48** are engaged.

Referring again to FIG. 2, the aperture **20** and adjacent cavity are defined by the rear sidewall **16b**, an opposed internal sidewall **50**, top sidewall **52**, and bottom sidewall **54** (all shown in phantom line).

The toothbrush and toothpaste storage device **10** and components thereof are comprised of material that is lightweight, durable, attractive, and resistant to transmission of moisture, such as plastic, hard rubber, various composite materials, and the like.

Referring to FIG. 3, therein illustrated is the toothbrush and toothpaste storage device **10** illustrated in exploded, perspective view displaying the various storage receptacles and components thereof. A rectangular cover **56** panel is located at the top of each toothbrush receptacle **22**. Each toothbrush receptacle **22** is disposed in a corresponding cavity **58** located within the toothbrush container **12**. The interior space of the toothpaste tube container **14** is enclosed by opposed **30a** and rear **30b** sidewalls, opposed first **32a** and second **32b** lateral sidewalls, and a bottom sidewall **60** (i.e. the top sidewall of the toothbrush container **12**.) The cover **14** is fitted into and through a slot **62** formed within the front sidewall **30a** and maintained in place by grooves **64** formed into opposed lateral sidewalls **32a, b**.

A toothbrush carrying case **66** is stored within the cavity located in the interior of the toothbrush container **12** and is accessed by sliding open the panel **26**. The carrying case **66** is comprised of a rectangular container **68**, two finger handles **70** extending from a sidewall thereof, and a cover **72** with finger pad **74**. The case **66** can be removed from the container **12** via the aperture **20** in the sidewall **18b** of said container **20** by grasping the finger handles **70**. As shown in FIG. 4, a pair of knobs **76** is located on opposing corners of the panel **26** and

functions to prevent the panel **26** from being separated from the container **12** when said panel **26** is pulled open to allow the carrying case **66** to be removed from or inserted into the toothbrush container **12**.

The components of the carrying case **66** are illustrated in detail in FIG. 5. The toothbrush carrying case **66** is designed for carrying and storing a series of toothbrushes for transport, such as during travel away from home, or the like. The rectangular container **68** of the case **66** is comprised in part of a first sidewall **78a** and a second **78b** opposed sidewall and a third sidewall **80a** and fourth **80b** opposed sidewall. A slot **82** is located in the fourth sidewall **80b** proximate to an unattached edge thereof, and grooves **84** are located in opposed sidewalls **78a, b** proximate to unattached edges thereof. The cover **72** is releasably attached to the container **68** by being inserted through the slot **82** with opposed, longer side edges thereof disposed within the grooves **84** when said cover **72** is fully inserted into the container **68**. A foam pad **86** is located within the container **68** adjacent to a rear or bottom sidewall of said container **68**, and a divider **88** having a plurality of partitions is disposed within the interior of the container **68**. The partitions of the divider **88** in conjunction with the foam pad **86** and sidewalls **78a, b, 80a, b** of the container **68** form a plurality of compartments **90** suitable for storage of toothbrushes. As shown, a toothbrush **92** is stored within one of the compartments **90**.

The divider **88**, illustrated in FIG. 6, is comprised of a series of elongate, rectangular partitions **94** that are disposed in parallel relation to each other. The

partitions **94** are connected in perpendicular arrangement proximate to one end thereof to a single partition **96**. Openings **98** are located in the single partition **96** adjacent to connections with elongate rectangular partitions **94**. The openings **98** receive the shank portion **100** of a toothbrush handle **102** when said toothbrush **92** is inserted within one of the compartments **90**, said compartments **90** formed when the divider **88** is disposed within the container **68** of the toothbrush carrying case **66**. More particularly, the compartments **90** are defined by any two adjacent elongate rectangular partitions **94**, the foam pad **86**, and lateral sidewalls **80a, b** of the container **68** of the toothbrush carrying case **66**, or an elongate rectangular partition **94**, the foam pad **86**, and adjacent sidewalls **78a, b, 80a, b** of the container **68** of the toothbrush carrying case **66**.

In FIG. 7, a toothbrush receptacle **22** is therein illustrated in detail. The receptacle **22** is comprised in part of a first pair of opposed first **104a** and second **104b** sidewalls and a second pair of opposed first **106a** and second **106b** sidewalls. A slot **108** is located in a sidewall **106b** proximate to an unattached edge thereof, and grooves **110** are located in opposed sidewalls **104a, b** proximate to unattached edges thereof. The cover **50** with finger pads **112, 114** is releasably attached to the receptacle **22** by being inserted into and through the slot **108** with opposing, longer side edges of said cover **50** disposed within cooperating grooves **110** when said cover **50** is fully inserted into the receptacle **22**. A toothbrush **92** is located within the interior of the receptacle **22**.

While this version of the invention has been illustrated and described in detail in the drawings and foregoing description, the same is to be considered as illustrative and not restrictive in character, it being understood that only the preferred embodiment has been shown and described and that all changes and modifications that come within the spirit of the version of the invention are desired to be protected. For instance, the toothbrush and toothpaste storage device can contain a toothbrush sterilizer with lights signaling the end of sterilization, toothpaste warmer, toothpaste and mouthwash dispenser, cup holder, and other features, such as integrated television, radio, time clock, and the like.

With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

CONCLUSION AND SCOPE OF INVENTION

From the foregoing, it will be understood by persons skilled in the art that an improved toothbrush and toothpaste storage device has been provided. The invention is relatively simple and easy to manufacture, yet affords a variety of uses. While my description contains many specificities, these should not be construed as

limitations on the scope of the version of the invention, but rather as an exemplification of the preferred embodiment thereof. The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention. Although this invention has been described in its preferred form with a certain degree of particularity, it is understood that the present disclosure of the preferred form has been made only by way of example and numerous changes in the details of construction and combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention.

While the invention has been described in connection with the preferred embodiment, it is not intended to limit the scope of the invention to the particular form set forth, but on the contrary, it is intended to cover such alternatives, modifications, and equivalents as may be included within the spirit and scope of the invention as defined by the appended claims.